

ANNUAL LANDFILL GAS EXTRACTION SYSTEM PERFORMANCE REPORT HELENA, MONTANA

Prepared For:

CITY OF HELENA
HELENA, MONTANA



Hydrometrics, Inc.
consulting scientists and engineers

JANUARY 2008

RECEIVED

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Dept. of Enviro. Quality
Waste & Underground
Tank Management Bureau



January 31, 2008

Ms. Mary Louise Hendrickson
Environmental Science Specialist
Montana Department of Environmental Quality
Solid Waste Program
P.O. Box 200901
Helena, MT 59620-0901

Dear Mary Louise,

On behalf of the City of Helena, I am submitting the annual performance review for the landfill gas extraction system operating at the old City of Helena landfill.

YMCA Landfill Gas Extraction System

The YMCA gas extraction system operated all of last year with only brief shut downs for maintenance. Extraction wells 1 and 2 remained turned off this past year since no methane was detected in these wells or nearby monitoring wells. The system had a combined average flow of 30.3 cfm from the remaining four extraction wells for a total of nearly 16 million cubic feet of landfill gas extracted during 2007. This gas had an average methane concentration of 7.7% which equals almost 29,000 kg of extracted methane. Air samples collected from the stack indicate that the average VOC concentration exiting the stack is 4.51 mg/m³ for a total of 8.43 kg of VOC's removed last year. Dichlorodifluoromethane is the compound present at the highest concentration. Attached are several tables showing all the data collected at the gas extraction system over the last year as well as a table showing a summary of the results. Also included are the lab results of the stack gas samples collected at the YMCA gas extraction system.

Carroll College Landfill Gas Interception Trench

Since the Carroll College interception trench is a passive system, volumes and masses were not calculated for this system. Attached are the lab results of the stack gas samples collected at the Carroll College gas interception trench header.

If you have any questions concerning this data or need any additional information, please do not hesitate to call me at 443-4150, Ext. 172.

Sincerely,

Jodi Bingham, P.E.
Environmental Engineer/Chemist

c: John Rundquist, City of Helena Public Works Director
Ben Sautter, City of Helena Solid Waste Supervisor
Mike Wignot, Hydrometrics, Inc.

2007 Performance Evaluation of YMCA Landfill Gas Extraction System

Monthly Flows at the Gas Extraction Wells (cfm)

Month	EW-1	EW-2	EW-3	EW-4	EW-5	EW-7	Total
January	NM	0.0	3.5	7.4	7.4	7.9	26.1
February	0.0	0.0	1.8	0.9	1.8	8.7	13.1
March	0.0	0.0	7.4	7.4	7.9	9.0	31.6
April	0.0	0.0	6.2	7.4	7.9	9.7	31.2
May	0.0	0.0	6.2	10.2	8.7	9.0	34.2
June	NM	2.6	7.4	9.0	8.7	9.0	36.8
July	NM	0.0	5.3	9.7	7.9	8.7	31.5
August	0.0	0.0	9.0	10.5	8.3	8.7	36.5
September	NM	0.0	8.7	10.0	8.7	8.3	35.6
October	0.0	0.0	9.4	9.0	9.0	9.4	36.8
November	0.0	0.0	4.4	5.3	10.5	7.4	27.6
December	0.0	0.0	1.8	0.0	9.4	12.2	23.3
Average	0.0	0.2	5.9	7.2	8.0	9.0	30.3
Total Annual Volume of Landfill Gas Extracted (cubic feet)							15,950,030

Monthly Methane at the Gas Extraction Wells (% methane)

Month	EW-1	EW-2	EW-3	EW-4	EW-5	EW-7	Flow Weighted Average
January	NM	0.0	12.0	5.7	12.0	13.0	6.4
February	0.0	0.0	13.0	6.3	12.5	12.5	3.6
March	0.0	0.0	9.7	5.0	10.0	11.5	8.0
April	0.0	0.0	1.8	4.7	8.9	9.1	8.3
May	0.0	0.0	4.1	4.6	9.5	9.0	8.7
June	NM	0.0	5.2	4.3	4.7	11.6	8.6
July	NM	0.0	4.9	4.0	8.8	8.6	7.9
August	0.0	0.0	6.5	4.6	10.5	11.0	8.9
September	NM	0.0	9.7	6.4	14.9	13.9	8.7
October	0.0	0.0	9.4	5.7	14.0	12.0	9.2
November	0.0	0.0	10.4	6.4	13.3	14.2	7.3
December	0.0	0.0	12.0	4.0	10.0	12.0	6.9
Average	0.0	0.0	8.2	5.1	10.8	11.5	7.7

Mass of Methane Removed by the Gas Extraction Wells (kg methane)

Month	EW-1	EW-2	EW-3	EW-4	EW-5	EW-7	Total
January	NM	0.0	381.5	379.5	798.9	921.2	2,481
February	0.0	0.0	186.6	45.2	179.5	883.7	1,295
March	0.0	0.0	645.8	332.9	708.6	937.6	2,625
April	0.0	0.0	98.2	302.8	610.3	769.2	1,781
May	0.0	0.0	231.1	425.2	743.6	733.8	2,134
June	NM	0.0	335.0	339.3	356.0	915.2	1,946
July	NM	0.0	233.7	349.4	623.6	673.2	1,880
August	0.0	0.0	529.9	435.9	784.7	861.0	2,612
September	NM	0.0	734.8	557.2	1,128.7	1,005.3	3,426
October	0.0	0.0	794.7	464.7	1,141.4	1,014.5	3,415
November	0.0	0.0	399.9	295.3	1,219.6	914.9	2,830
December	0.0	0.0	190.7	0.0	845.4	1,316.5	2,353
Total	0.0	0.0	4,762	3,927	9,140	10,946	28,776

YMCA Gas Extraction System Stack Gas Sample Results Summary (mg/m³)

Compound	1/17/2007	4/11/2007	7/12/2007	10/10/2007	Average	Total (kg)
Dichlorodifluoromethane	4.4	2.1	3.1	3.6	3.30	6.11
cis-1,2-Dichloroethene	1.3	ND	0.7	0.74	0.69	1.24
Vinyl chloride	ND	0.69	ND	1.4	0.52	1.09
Total Monthly Flow (cfm)	26.1	31.2	31.5	36.8		
TOTAL					4.51	8.43

NM = Not Measured

ND = Not Detected at the reporting limit

HELENA LANDFILL
GAS EXTRACTION SYSTEM

WELL 1

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007			No Measurement - car parked on well				
2/20/2007	0.0	0.0	0.0	6.6	6.3	63.4	nm
3/7/2007	0.0	0.0	0.0	7.3	6.3	62.7	nm
4/12/2007	0.0	0.0	0.0	6.0	13.0	32.1	39
5/30/2007	0.0	0.0	0.0	8.8	7.0	57.9	nm
6/26/2007			No Measurement - car parked on well				
7/12/2007			No Measurement - car parked on well				
8/29/2007	0.0	0.0	0.0	12.0	4.6	66.1	nm
9/5/2007			No Measurement - car parked on well				
10/10/2007	0.0	0.0	0.0	0.0	4.1	80.5	50
11/20/2007	0.0	0.0	0.0	0.0	3.8	81.9	49
12/17/2007	0.0	0.0	0.0	7.0	6.8	60.6	nm
Average		0.0	0.0	6.8	6.9	60.5	

HELENA LANDFILL
GAS EXTRACTION SYSTEM

WELL 2

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007	0.0	0.0	0.0	2.3	16.2	20.6	19
2/20/2007	0.0	0.0	0.0	2.3	15.1	25.8	35
3/7/2007	0.0	0.0	0.0	2.8	11.9	40.6	40
4/12/2007	0.0	0.0	0.0	4.1	12.4	36.9	45
5/30/2007	0.0	0.0	0.0	4.1	14.7	25.9	55
6/26/2007	0.3	2.6	0.0	4.6	13.0	33.5	70
7/12/2007	0.0	0.0	0.0	4.4	12.1	38.0	60
8/29/2007	0.0	0.0	0.0	8.2	8.9	49.4	75
9/5/2007	0.0	0.0	0.0	10.8	6.2	59.7	70
10/10/2007	0.0	0.0	0.0	6.8	11.6	38.0	55
11/20/2007	0.0	0.0	0.0	6.2	12.2	35.7	52
12/17/2007	0.0	0.0	0.0	3.5	14.9	25.6	35
Average		0.2	0.0	5.0	12.4	33.1	

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GAS EXTRACTION SYSTEM

WELL 3

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007	0.4	3.5	12.0	14.0	1.0	69.2	55
2/20/2007	0.2	1.8	13.0	14.0	0.5	70.6	55
3/7/2007	0.9	7.4	9.7	14.0	0.5	73.9	50
4/12/2007	0.7	6.2	1.8	14.0	0.9	79.9	55
5/30/2007	0.7	6.2	4.1	15.0	0.7	77.6	55
6/26/2007	0.9	7.4	5.2	22.8	0.0	72.0	65
7/12/2007	0.6	5.3	4.9	17.0	0.6	75.2	73
8/29/2007	1.3	9.0	6.5	17.0	0.6	73.6	69
9/5/2007	1.2	8.7	9.7	22.2	0.0	68.1	70
10/10/2007	1.4	9.4	9.4	17.0	0.6	70.7	62
11/20/2007	0.5	4.4	10.4	21.6	0.0	68.0	60
12/17/2007	0.2	1.8	12.0	14.0	0.9	69.7	50
Average		5.9	8.2	16.9	0.5	69.5	

HELENA LANDFILL
GAS EXTRACTION SYSTEM

WELL 4

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007	0.9	7.4	5.7	12.0	3.2	67.1	65
2/20/2007	0.1	0.9	6.3	12.0	2.5	69.8	65
3/7/2007	0.9	7.4	5.0	12.0	2.6	70.6	70
4/12/2007	0.9	7.4	4.7	13.0	3.6	65.2	72
5/30/2007	1.7	10.2	4.6	14.0	3.3	65.7	74
6/26/2007	1.3	9.0	4.3	20.6	1.1	69.9	80
7/12/2007	1.5	9.7	4.0	15.0	2.9	67.2	85
8/29/2007	1.8	10.5	4.6	15.0	2.9	66.6	75
9/5/2007	1.6	10.0	6.4	19.3	1.5	67.2	88
10/10/2007	1.3	9.0	5.7	15.0	2.6	66.9	83
11/20/2007	0.6	5.3	6.4	19.8	0.3	72.4	72
12/17/2007	0.0	0.0	4.0	12.0	3.5	67.3	65
Average		7.2	5.1	15.0	2.5	68.9	

HELENA LANDFILL
GAS EXTRACTION SYSTEM

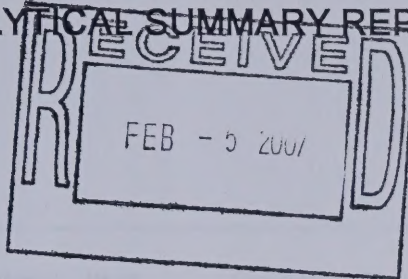
WELL 5

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007	0.9	7.4	12.0	16.0	0.6	69.1	55
2/20/2007	0.2	1.8	12.5	15.0	0.6	69.6	55
3/7/2007	1.0	7.9	10.0	16.0	0.1	73.5	58
4/12/2007	1.0	7.9	8.9	18.0	0.5	70.7	62
5/30/2007	1.2	8.7	9.5	18.0	0.2	71.5	68
6/26/2007	1.2	8.7	4.7	20.4	0.0	74.9	70
7/12/2007	1.0	7.9	8.8	20.0	0.8	67.4	78
8/29/2007	1.1	8.3	10.5	19.0	0.6	67.6	78
9/5/2007	1.2	8.7	14.9	23.7	0.0	61.4	80
10/10/2007	1.3	9.0	14.0	19.0	0.4	65.1	76
11/20/2007	1.8	10.5	13.3	23.9	0.0	62.8	73
12/17/2007	1.4	9.4	10.0	16.0	0.6	71.1	68
Average		8.0	10.8	18.8	0.4	66.3	

HELENA LANDFILL
GAS EXTRACTION SYSTEM

WELL 7

DATE	DP (mB)	FLOW (CFM)	% CH4	%CO2	%O2	% RN	TEMP (DEG F)
1/17/2007	1.0	7.9	13.0	16.0	2.5	59.1	82
2/20/2007	1.2	8.7	12.5	14.0	2.6	61.1	82
3/7/2007	1.3	9.0	11.5	15.0	2.2	63.0	84
4/12/2007	1.5	9.7	9.1	14.0	3.0	62.6	85
5/30/2007	1.3	9.0	9.0	17.0	2.8	60.7	84
6/26/2007	1.3	9.0	11.6	23.1	1.3	59.1	85
7/12/2007	1.2	8.7	8.6	16.0	2.8	62.1	83
8/29/2007	1.2	8.7	11.0	19.0	2.2	59.5	84
9/5/2007	1.1	8.3	13.9	23.0	1.2	57.4	85
10/10/2007	1.4	9.4	12.0	19.0	2.3	58.1	83
11/20/2007	0.9	7.4	14.2	22.9	0.9	58.6	85
12/17/2007	2.6	12.2	12.0	14.0	3.5	57.3	85
Average		9.0	11.5	17.8	2.3	58.0	

ANALYTICAL SUMMARY REPORT

January 31, 2007

Hydrometrics Inc
3020 Bozeman Ave.
Helena, MT 59601

Workorder No.: H07010140

Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 2 samples from Hydrometrics Inc on 1/17/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H07010140-001	YMCA Stack	01/17/07 10:45	01/17/07	Air	8260-Volatile Organic Comp, 40 CFR Part 258 App I
H07010140-002	CC Stack	01/17/07 13:30	01/17/07	Air	Same As Above

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____

CASE NARRATIVE

NONE

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07010140-001
Client Sample ID: YMCA Stack

Report Date: 01/31/07
Collection Date: 01/17/07 10:45
Date Received: 01/17/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	01/23/07 16:13 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	01/23/07 16:13 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Dichlorodifluoromethane	4.4	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
cis-1,2-Dichloroethene	1.3	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	01/23/07 16:13 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	01/23/07 16:13 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	01/23/07 16:13 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07010140-001
Client Sample ID: YMCA Stack

Report Date: 01/31/07
Collection Date: 01/17/07 10:45
Date Received: 01/17/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Vinyl chloride	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	01/23/07 16:13 / eli-b
Surr: 1,2-Dichloroethane-d4	84.0	%REC			70-130	SW8260B	01/23/07 16:13 / eli-b
Surr: Dibromofluoromethane	91.0	%REC			77-126	SW8260B	01/23/07 16:13 / eli-b
Surr: p-Bromofluorobenzene	96.0	%REC			76-127	SW8260B	01/23/07 16:13 / eli-b
Surr: Toluene-d8	94.0	%REC			79-122	SW8260B	01/23/07 16:13 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07010140-002
Client Sample ID: CC Stack

Report Date: 01/31/07
Collection Date: 01/17/07 13:30
Date Received: 01/17/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	01/23/07 17:11 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	01/23/07 17:11 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Dichlorodifluoromethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
cis-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	01/23/07 17:11 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	01/23/07 17:11 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	01/23/07 17:11 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07010140-002
Client Sample ID: CC Stack

Report Date: 01/31/07
Collection Date: 01/17/07 13:30
Date Received: 01/17/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Vinyl chloride	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	01/23/07 17:11 / eli-b
Surr: 1,2-Dichloroethane-d4	86.0	%REC			70-130	SW8260B	01/23/07 17:11 / eli-b
Surr: Dibromofluoromethane	94.0	%REC			77-126	SW8260B	01/23/07 17:11 / eli-b
Surr: p-Bromofluorobenzene	95.0	%REC			76-127	SW8260B	01/23/07 17:11 / eli-b
Surr: Toluene-d8	93.0	%REC			79-122	SW8260B	01/23/07 17:11 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 01/31/07
Work Order: H07010140

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R88703		
Sample ID: LCSAIR	Laboratory Control Sample				Run: SUB-B88703		01/23/07 12:39		
Acetone	33.7	mg/m3	10	67	62	130			
Benzene	4.68	mg/m3	0.50	94	71	133			
Bromochloromethane	4.84	mg/m3	0.50	97	68	131			
Bromodichloromethane	4.68	mg/m3	0.50	94	67	138			
Bromoform	4.56	mg/m3	0.50	91	64	136			
Bromomethane	3.85	mg/m3	0.50	77	60	138			
Carbon tetrachloride	4.84	mg/m3	0.50	97	61	144			
Chlorobenzene	5.00	mg/m3	0.50	100	78	136			
Chlorodibromomethane	5.00	mg/m3	0.50	100	72	136			
Chloroethane	4.68	mg/m3	0.50	94	64	136			
Chloroform	4.80	mg/m3	0.50	96	69	133			
Chloromethane	5.20	mg/m3	0.50	104	63	149			
1,2-Dibromo-3-chloropropane	3.93	mg/m3	0.50	79	63	125			
1,2-Dibromoethane	4.68	mg/m3	0.50	94	75	131			
Dibromomethane	4.64	mg/m3	0.50	93	72	133			
1,2-Dichlorobenzene	4.76	mg/m3	0.50	95	78	129			
1,4-Dichlorobenzene	4.72	mg/m3	0.50	94	78	132			
Dichlorodifluoromethane	4.04	mg/m3	0.50	81	55	141			
1,1-Dichloroethane	4.64	mg/m3	0.50	93	72	130			
1,2-Dichloroethane	4.84	mg/m3	0.50	97	57	146			
1,1-Dichloroethene	4.72	mg/m3	0.50	94	66	142			
cis-1,2-Dichloroethene	4.88	mg/m3	0.50	98	74	133			
trans-1,2-Dichloroethene	4.96	mg/m3	0.50	99	76	138			
1,2-Dichloropropane	4.92	mg/m3	0.50	98	72	135			
cis-1,3-Dichloropropene	5.08	mg/m3	0.50	102	75	132			
trans-1,3-Dichloropropene	5.36	mg/m3	0.50	107	77	145			
Ethylbenzene	4.88	mg/m3	0.50	98	78	131			
2-Hexanone	36.4	mg/m3	10	73	72	131			
Methyl ethyl ketone	35.2	mg/m3	10	70	55	145			
Methyl isobutyl ketone	36.1	mg/m3	10	72	73	129			S
Methylene chloride	4.80	mg/m3	0.50	96	73	126			
Styrene	5.08	mg/m3	0.50	102	76	134			
1,1,1,2-Tetrachloroethane	5.04	mg/m3	0.50	101	75	135			
1,1,2,2-Tetrachloroethane	4.28	mg/m3	0.50	86	72	132			
Tetrachloroethene	5.08	mg/m3	0.50	102	78	137			
Toluene	4.92	mg/m3	0.50	98	78	134			
1,1,1-Trichloroethane	4.84	mg/m3	0.50	97	64	141			
1,1,2-Trichloroethane	4.68	mg/m3	0.50	94	72	133			
Trichloroethene	4.84	mg/m3	0.50	97	75	138			
Trichlorofluoromethane	4.56	mg/m3	0.50	91	58	139			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 01/31/07
Work Order: H07010140

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R88703		
Sample ID: LCSAIR	Laboratory Control Sample				Run: SUB-B88703		01/23/07 12:39		
1,2,3-Trichloropropane	3.79	mg/m3	0.50	76	67	133			
Vinyl chloride	4.16	mg/m3	0.50	83	66	140			
m+p-Xylenes	9.96	mg/m3	0.50	100	78	133			
o-Xylene	5.16	mg/m3	0.50	103	79	136			
Surr: 1,2-Dichloroethane-d4			0.50	87	70	130			
Surr: Dibromofluoromethane			0.50	94	77	126			
Surr: p-Bromofluorobenzene			0.50	93	76	127			
Surr: Toluene-d8			0.50	100	79	122			
Sample ID: BLKAir	Method Blank				Run: SUB-B88703		01/23/07 14:12		
Acetone	ND	mg/m3	10						
Acrylonitrile	ND	mg/m3	10						
Benzene	ND	mg/m3	0.50						
Bromochloromethane	ND	mg/m3	0.50						
Bromodichloromethane	ND	mg/m3	0.50						
Bromoform	ND	mg/m3	0.50						
Bromomethane	ND	mg/m3	0.50						
Carbon disulfide	ND	mg/m3	0.50						
Carbon tetrachloride	ND	mg/m3	0.50						
Chlorobenzene	ND	mg/m3	0.50						
Chlorodibromomethane	ND	mg/m3	0.50						
Chloroethane	ND	mg/m3	0.50						
Chloroform	ND	mg/m3	0.50						
Chloromethane	ND	mg/m3	0.50						
1,2-Dibromo-3-chloropropane	ND	mg/m3	0.50						
1,2-Dibromoethane	ND	mg/m3	0.50						
Dibromomethane	ND	mg/m3	0.50						
1,2-Dichlorobenzene	ND	mg/m3	0.50						
1,4-Dichlorobenzene	ND	mg/m3	0.50						
trans-1,4-Dichloro-2-butene	ND	mg/m3	0.50						
Dichlorodifluoromethane	ND	mg/m3	0.50						
1,1-Dichloroethane	ND	mg/m3	0.50						
1,2-Dichloroethane	ND	mg/m3	0.50						
1,1-Dichloroethene	ND	mg/m3	0.50						
cis-1,2-Dichloroethene	ND	mg/m3	0.50						
trans-1,2-Dichloroethene	ND	mg/m3	0.50						
1,2-Dichloropropane	ND	mg/m3	0.50						
cis-1,3-Dichloropropene	ND	mg/m3	0.50						
trans-1,3-Dichloropropene	ND	mg/m3	0.50						
Ethylbenzene	ND	mg/m3	0.50						
2-Hexanone	ND	mg/m3	10						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

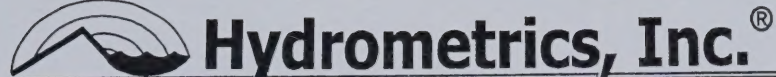
Report Date: 01/31/07
Work Order: H07010140

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R88703		
Sample ID: BLKAir	Method Blank		Run: SUB-B88703				01/23/07 14:12		
Iodomethane	ND	mg/m3	0.50						
Methyl ethyl ketone	ND	mg/m3	10						
Methyl isobutyl ketone	ND	mg/m3	10						
Methylene chloride	ND	mg/m3	0.50						
Styrene	ND	mg/m3	0.50						
1,1,1,2-Tetrachloroethane	ND	mg/m3	0.50						
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.50						
Tetrachloroethene	ND	mg/m3	0.50						
Toluene	ND	mg/m3	0.50						
1,1,1-Trichloroethane	ND	mg/m3	0.50						
1,1,2-Trichloroethane	ND	mg/m3	0.50						
Trichloroethene	ND	mg/m3	0.50						
Trichlorofluoromethane	ND	mg/m3	0.50						
1,2,3-Trichloropropane	ND	mg/m3	0.50						
Vinyl acetate	ND	mg/m3	0.50						
Vinyl chloride	ND	mg/m3	0.50						
m+p-Xylenes	ND	mg/m3	0.50						
o-Xylene	ND	mg/m3	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	82	70	130			
Surr: Dibromofluoromethane			0.50	90	77	126			
Surr: p-Bromofluorobenzene			0.50	94	76	127			
Surr: Toluene-d8			0.50	100	79	122			
Sample ID: LCSALx	Laboratory Control Sample		Run: SUB-B88703				01/23/07 14:57		
Acrylonitrile	39.2	mg/m3	10	78	60	130			
Carbon disulfide	4.48	mg/m3	0.50	90	46	146			
trans-1,4-Dichloro-2-butene	4.16	mg/m3	0.50	83	50	142			
Iodomethane	4.80	mg/m3	0.50	96	66	132			
Vinyl acetate	5.32	mg/m3	0.50	106	42	120			
Surr: 1,2-Dichloroethane-d4			0.50	84	70	130			
Surr: Dibromofluoromethane			0.50	92	77	126			
Surr: p-Bromofluorobenzene			0.50	93	76	127			
Surr: Toluene-d8			0.50	97	79	122			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



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HFORM-1-5/99

Return results & electronic copy to:

Split Samples:
☐ Accepted ☐ Declined

Signature _____



Energy Laboratories Inc

Sample Receipt Checklist

Client Name Hydrometrics Inc

Date and Time Received: 1/17/2007 2:55:00 PM

Work Order Number H07010140

Received by rit

Login completed by: Roxanne L. Tubbs

1/17/2007 2:55:00

Reviewed by

Signature

Date

Initials

Date

Carrier name Hand Del

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	na °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Adjusted? _____ Checked by _____

Contact and Corrective Action Comments:

None.



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[illegible]

Return results & electronic copy to:

Split Samples:
☐ Accepted ☐ Declined

ANALYTICAL SUMMARY REPORT

April 30, 2007

Hydrometrics Inc
3020 Bozeman Ave.
Helena, MT 59601

Workorder No.: H07040098

Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 2 samples from Hydrometrics Inc on 4/11/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H07040098-001	YMCA Stack	04/11/07 14:00	04/11/07	Air	8260-Volatile Organic Comp, 40 CFR Part 258 App I
H07040098-002	CC Stack	04/11/07 14:30	04/11/07	Air	Same As Above

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

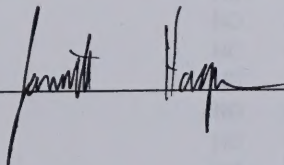
SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____


CASE NARRATIVE

NONE

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07040098-001
Client Sample ID: YMCA Stack

Report Date: 04/30/07
Collection Date: 04/11/07 14:00
Date Received: 04/11/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	04/24/07 15:52 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	04/24/07 15:52 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Dichlorodifluoromethane	2.1	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
cis-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	04/24/07 15:52 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	04/24/07 15:52 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	04/24/07 15:52 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07040098-001
Client Sample ID: YMCA Stack

Report Date: 04/30/07
Collection Date: 04/11/07 14:00
Date Received: 04/11/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Vinyl chloride	0.69	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	04/24/07 15:52 / eli-b
Surr: 1,2-Dichloroethane-d4	94.0	%REC			70-130	SW8260B	04/24/07 15:52 / eli-b
Surr: Dibromofluoromethane	102	%REC			77-126	SW8260B	04/24/07 15:52 / eli-b
Surr: p-Bromofluorobenzene	98.0	%REC			76-127	SW8260B	04/24/07 15:52 / eli-b
Surr: Toluene-d8	102	%REC			79-122	SW8260B	04/24/07 15:52 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07040098-002
Client Sample ID: CC Stack

Report Date: 04/30/07
Collection Date: 04/11/07 14:30
Date Received: 04/11/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	04/25/07 14:46 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	04/25/07 14:46 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Dichlorodifluoromethane	8.0	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1-Dichloroethane	0.94	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
cis-1,2-Dichloroethene	5.6	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	04/25/07 14:46 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	04/25/07 14:46 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	04/25/07 14:46 / eli-b
Methylene chloride	1.1	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07040098-002
Client Sample ID: CC Stack

Report Date: 04/30/07
Collection Date: 04/11/07 14:30
Date Received: 04/11/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Vinyl chloride	0.52	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	04/25/07 14:46 / eli-b
Surr: 1,2-Dichloroethane-d4	86.0	%REC			70-130	SW8260B	04/25/07 14:46 / eli-b
Surr: Dibromofluoromethane	98.0	%REC			77-126	SW8260B	04/25/07 14:46 / eli-b
Surr: p-Bromofluorobenzene	98.0	%REC			76-127	SW8260B	04/25/07 14:46 / eli-b
Surr: Toluene-d8	102	%REC			79-122	SW8260B	04/25/07 14:46 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 04/30/07
Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R92652		
Sample ID: LCSAir1	Laboratory Control Sample			Run: SUB-B92652			04/24/07 11:34		
Acetone	37.7	mg/m3	10	75	62	130			
Benzene	5.36	mg/m3	0.50	107	71	133			
Bromochloromethane	5.84	mg/m3	0.50	117	68	131			
Bromodichloromethane	6.36	mg/m3	0.50	127	67	138			
Bromoform	6.40	mg/m3	0.50	128	64	136			
Bromomethane	4.12	mg/m3	0.50	82	60	138			
Carbon tetrachloride	5.88	mg/m3	0.50	118	61	144			
Chlorobenzene	5.72	mg/m3	0.50	114	78	136			
Chlorodibromomethane	6.32	mg/m3	0.50	126	72	136			
Chloroethane	5.04	mg/m3	0.50	101	64	136			
Chloroform	5.68	mg/m3	0.50	114	69	133			
Chloromethane	4.96	mg/m3	0.50	99	63	149			
1,2-Dibromo-3-chloropropane	5.28	mg/m3	0.50	106	63	125			
1,2-Dibromoethane	5.96	mg/m3	0.50	119	75	131			
Dibromomethane	5.88	mg/m3	0.50	118	72	133			
1,2-Dichlorobenzene	5.72	mg/m3	0.50	114	78	129			
1,4-Dichlorobenzene	5.68	mg/m3	0.50	114	78	132			
Dichlorodifluoromethane	4.60	mg/m3	0.50	92	55	141			
1,1-Dichloroethane	5.48	mg/m3	0.50	110	72	130			
1,2-Dichloroethane	5.40	mg/m3	0.50	108	57	146			
1,1-Dichloroethene	5.92	mg/m3	0.50	118	66	142			
cis-1,2-Dichloroethene	5.68	mg/m3	0.50	114	74	133			
trans-1,2-Dichloroethene	5.40	mg/m3	0.50	108	76	138			
1,2-Dichloropropane	5.72	mg/m3	0.50	114	72	135			
cis-1,3-Dichloropropene	5.88	mg/m3	0.50	118	75	132			
trans-1,3-Dichloropropene	5.64	mg/m3	0.50	113	77	145			
Ethylbenzene	6.00	mg/m3	0.50	120	78	131			
2-Hexanone	47.2	mg/m3	10	94	72	131			
Methyl ethyl ketone	42.4	mg/m3	10	85	55	145			
Methyl isobutyl ketone	45.2	mg/m3	10	90	73	129			
Methylene chloride	6.00	mg/m3	0.50	120	73	126			
Styrene	5.80	mg/m3	0.50	116	76	134			
1,1,1,2-Tetrachloroethane	6.04	mg/m3	0.50	121	75	135			
1,1,1,2,2-Tetrachloroethane	5.44	mg/m3	0.50	109	72	132			
Tetrachloroethene	5.60	mg/m3	0.50	112	78	137			
Toluene	5.72	mg/m3	0.50	114	78	134			
1,1,1-Trichloroethane	5.76	mg/m3	0.50	115	64	141			
1,1,2-Trichloroethane	6.08	mg/m3	0.50	122	72	133			
Trichloroethene	5.56	mg/m3	0.50	111	75	138			
Trichlorofluoromethane	5.00	mg/m3	0.50	100	58	139			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 04/30/07
Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R92652		
Sample ID: LCSAir1	Laboratory Control Sample				Run: SUB-B92652			04/24/07 11:34	
1,2,3-Trichloropropane	6.32	mg/m3	0.50	126	67	133			
Vinyl chloride	4.68	mg/m3	0.50	94	66	140			
m+p-Xylenes	11.6	mg/m3	0.50	116	78	133			
o-Xylene	5.76	mg/m3	0.50	115	79	136			
Surr: 1,2-Dichloroethane-d4			0.50	91	70	130			
Surr: Dibromofluoromethane			0.50	100	77	126			
Surr: p-Bromofluorobenzene			0.50	101	76	127			
Surr: Toluene-d8			0.50	106	79	122			
Sample ID: BLKAir	Method Blank				Run: SUB-B92652			04/24/07 14:27	
Acetone	ND	mg/m3	10						
Acrylonitrile	ND	mg/m3	10						
Benzene	ND	mg/m3	0.50						
Bromochloromethane	ND	mg/m3	0.50						
Bromodichloromethane	ND	mg/m3	0.50						
Bromoform	ND	mg/m3	0.50						
Bromomethane	ND	mg/m3	0.50						
Carbon disulfide	ND	mg/m3	0.50						
Carbon tetrachloride	ND	mg/m3	0.50						
Chlorobenzene	ND	mg/m3	0.50						
Chlorodibromomethane	ND	mg/m3	0.50						
Chloroethane	ND	mg/m3	0.50						
Chloroform	ND	mg/m3	0.50						
Chloromethane	ND	mg/m3	0.50						
1,2-Dibromo-3-chloropropane	ND	mg/m3	0.50						
1,2-Dibromoethane	ND	mg/m3	0.50						
Dibromomethane	ND	mg/m3	0.50						
1,2-Dichlorobenzene	ND	mg/m3	0.50						
1,4-Dichlorobenzene	ND	mg/m3	0.50						
trans-1,4-Dichloro-2-butene	ND	mg/m3	0.50						
Dichlorodifluoromethane	ND	mg/m3	0.50						
1,1-Dichloroethane	ND	mg/m3	0.50						
1,2-Dichloroethane	ND	mg/m3	0.50						
1,1-Dichloroethene	ND	mg/m3	0.50						
cis-1,2-Dichloroethene	ND	mg/m3	0.50						
trans-1,2-Dichloroethene	ND	mg/m3	0.50						
1,2-Dichloropropane	ND	mg/m3	0.50						
cis-1,3-Dichloropropene	ND	mg/m3	0.50						
trans-1,3-Dichloropropene	ND	mg/m3	0.50						
Ethylbenzene	ND	mg/m3	0.50						
2-Hexanone	ND	mg/m3	10						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
 Project: 1273 City of Helena

Report Date: 04/30/07
 Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R92652		
Sample ID: BLKAir	Method Blank		Run: SUB-B92652				04/24/07 14:27		
Iodomethane	ND	mg/m3	0.50						
Methyl ethyl ketone	ND	mg/m3	10						
Methyl isobutyl ketone	ND	mg/m3	10						
Methylene chloride	ND	mg/m3	0.50						
Styrene	ND	mg/m3	0.50						
1,1,1,2-Tetrachloroethane	ND	mg/m3	0.50						
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.50						
Tetrachloroethene	ND	mg/m3	0.50						
Toluene	ND	mg/m3	0.50						
1,1,1-Trichloroethane	ND	mg/m3	0.50						
1,1,2-Trichloroethane	ND	mg/m3	0.50						
Trichloroethene	ND	mg/m3	0.50						
Trichlorofluoromethane	ND	mg/m3	0.50						
1,2,3-Trichloropropane	ND	mg/m3	0.50						
Vinyl acetate	ND	mg/m3	0.50						
Vinyl chloride	ND	mg/m3	0.50						
m+p-Xylenes	ND	mg/m3	0.50						
o-Xylene	ND	mg/m3	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	90	70	130			
Surr: Dibromofluoromethane			0.50	98	77	126			
Surr: p-Bromofluorobenzene			0.50	99	76	127			
Surr: Toluene-d8			0.50	100	79	122			
Sample ID: LCSAIR1	Laboratory Control Sample		Run: SUB-B92652				04/25/07 12:01		
Acetone	27.1	mg/m3	10	54	62	130			S
Benzene	4.80	mg/m3	0.50	96	71	133			
Bromochloromethane	4.92	mg/m3	0.50	98	68	131			
Bromodichloromethane	5.52	mg/m3	0.50	110	67	138			
Bromoform	5.20	mg/m3	0.50	104	64	136			
Bromomethane	3.36	mg/m3	0.50	67	60	138			
Carbon tetrachloride	5.04	mg/m3	0.50	101	61	144			
Chlorobenzene	5.24	mg/m3	0.50	105	78	136			
Chlorodibromomethane	5.32	mg/m3	0.50	106	72	136			
Chloroethane	4.28	mg/m3	0.50	86	64	136			
Chloroform	4.88	mg/m3	0.50	98	69	133			
Chloromethane	4.20	mg/m3	0.50	84	63	149			
1,2-Dibromo-3-chloropropane	3.95	mg/m3	0.50	79	63	125			
1,2-Dibromoethane	4.88	mg/m3	0.50	98	75	131			
Dibromomethane	5.04	mg/m3	0.50	101	72	133			
1,2-Dichlorobenzene	5.00	mg/m3	0.50	100	78	129			
1,4-Dichlorobenzene	4.96	mg/m3	0.50	99	78	132			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 04/30/07
Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R92652		
Sample ID: LCSAIR1	Laboratory Control Sample			Run: SUB-B92652			04/25/07 12:01		
Dichlorodifluoromethane	3.90	mg/m3	0.50	78	55	141			
1,1-Dichloroethane	4.84	mg/m3	0.50	97	72	130			
1,2-Dichloroethane	4.32	mg/m3	0.50	86	57	146			
1,1-Dichloroethene	4.84	mg/m3	0.50	97	66	142			
cis-1,2-Dichloroethene	5.00	mg/m3	0.50	100	74	133			
trans-1,2-Dichloroethene	4.80	mg/m3	0.50	96	76	138			
1,2-Dichloropropane	5.08	mg/m3	0.50	102	72	135			
cis-1,3-Dichloropropene	5.16	mg/m3	0.50	103	75	132			
trans-1,3-Dichloropropene	4.72	mg/m3	0.50	94	77	145			
Ethylbenzene	5.48	mg/m3	0.50	110	78	131			
2-Hexanone	35.7	mg/m3	10	71	72	131			S
Methyl ethyl ketone	31.2	mg/m3	10	62	55	145			
Methyl isobutyl ketone	35.4	mg/m3	10	71	73	129			S
Methylene chloride	4.92	mg/m3	0.50	98	73	126			
Styrene	5.12	mg/m3	0.50	102	76	134			
1,1,1,2-Tetrachloroethane	5.36	mg/m3	0.50	107	75	135			
1,1,2,2-Tetrachloroethane	4.40	mg/m3	0.50	88	72	132			
Tetrachloroethene	5.28	mg/m3	0.50	106	78	137			
Toluene	5.20	mg/m3	0.50	104	78	134			
1,1,1-Trichloroethane	4.92	mg/m3	0.50	98	64	141			
1,1,2-Trichloroethane	5.04	mg/m3	0.50	101	72	133			
Trichloroethene	5.00	mg/m3	0.50	100	75	138			
Trichlorofluoromethane	4.24	mg/m3	0.50	85	58	139			
1,2,3-Trichloropropane	5.04	mg/m3	0.50	101	67	133			
Vinyl chloride	4.00	mg/m3	0.50	80	66	140			
m+p-Xylenes	10.2	mg/m3	0.50	102	78	133			
o-Xylene	5.08	mg/m3	0.50	102	79	136			
Surr: 1,2-Dichloroethane-d4			0.50	84	70	130			
Surr: Dibromofluoromethane			0.50	92	77	126			
Surr: p-Bromofluorobenzene			0.50	98	76	127			
Surr: Toluene-d8			0.50	106	79	122			
Sample ID: BLKAIR	Method Blank			Run: SUB-B92652			04/25/07 14:03		
Acetone	ND	mg/m3	10						
Acrylonitrile	ND	mg/m3	10						
Benzene	ND	mg/m3	0.50						
Bromochloromethane	ND	mg/m3	0.50						
Bromodichloromethane	ND	mg/m3	0.50						
Bromoform	ND	mg/m3	0.50						
Bromomethane	ND	mg/m3	0.50						
Carbon disulfide	ND	mg/m3	0.50						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 04/30/07
Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R92652		
Sample ID: BLKAIR	Method Blank		Run: SUB-B92652				04/25/07 14:03		
Carbon tetrachloride	ND	mg/m3	0.50						
Chlorobenzene	ND	mg/m3	0.50						
Chlorodibromomethane	ND	mg/m3	0.50						
Chloroethane	ND	mg/m3	0.50						
Chloroform	ND	mg/m3	0.50						
Chloromethane	ND	mg/m3	0.50						
1,2-Dibromo-3-chloropropane	ND	mg/m3	0.50						
1,2-Dibromoethane	ND	mg/m3	0.50						
Dibromomethane	ND	mg/m3	0.50						
1,2-Dichlorobenzene	ND	mg/m3	0.50						
1,4-Dichlorobenzene	ND	mg/m3	0.50						
trans-1,4-Dichloro-2-butene	ND	mg/m3	0.50						
Dichlorodifluoromethane	ND	mg/m3	0.50						
1,1-Dichloroethane	ND	mg/m3	0.50						
1,2-Dichloroethane	ND	mg/m3	0.50						
1,1-Dichloroethene	ND	mg/m3	0.50						
cis-1,2-Dichloroethene	ND	mg/m3	0.50						
trans-1,2-Dichloroethene	ND	mg/m3	0.50						
1,2-Dichloropropane	ND	mg/m3	0.50						
cis-1,3-Dichloropropene	ND	mg/m3	0.50						
trans-1,3-Dichloropropene	ND	mg/m3	0.50						
Ethylbenzene	ND	mg/m3	0.50						
2-Hexanone	ND	mg/m3	10						
Iodomethane	ND	mg/m3	0.50						
Methyl ethyl ketone	ND	mg/m3	10						
Methyl isobutyl ketone	ND	mg/m3	10						
Methylene chloride	ND	mg/m3	0.50						
Styrene	ND	mg/m3	0.50						
1,1,1,2-Tetrachloroethane	ND	mg/m3	0.50						
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.50						
Tetrachloroethene	ND	mg/m3	0.50						
Toluene	ND	mg/m3	0.50						
1,1,1-Trichloroethane	ND	mg/m3	0.50						
1,1,2-Trichloroethane	ND	mg/m3	0.50						
Trichloroethene	ND	mg/m3	0.50						
Trichlorofluoromethane	ND	mg/m3	0.50						
1,2,3-Trichloropropane	ND	mg/m3	0.50						
Vinyl acetate	ND	mg/m3	0.50						
Vinyl chloride	ND	mg/m3	0.50						
m+p-Xylenes	ND	mg/m3	0.50						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
 Project: 1273 City of Helena

Report Date: 04/30/07
 Work Order: H07040098

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: B_R92652
Sample ID: BLKAIR	Method Blank		Run: SUB-B92652			04/25/07 14:03			
o-Xylene	ND	mg/m3	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	82	70	130			
Surr: Dibromofluoromethane			0.50	94	77	126			
Surr: p-Bromofluorobenzene			0.50	100	76	127			
Surr: Toluene-d8			0.50	102	79	122			
Sample ID: LCSAIR	Laboratory Control Sample		Run: SUB-B92652			04/24/07 13:37			
Acrylonitrile	46.0	mg/m3	10	92	60	130			
Carbon disulfide	4.56	mg/m3	0.50	91	46	146			
trans-1,4-Dichloro-2-butene	5.20	mg/m3	0.50	104	50	142			
Iodomethane	4.48	mg/m3	0.50	90	66	132			
Vinyl acetate	5.96	mg/m3	0.50	119	42	120			
Sample ID: LCS2	Laboratory Control Sample		Run: SUB-B92652			04/25/07 13:00			
Acrylonitrile	44.8	mg/m3	10	90	60	130			
Carbon disulfide	5.04	mg/m3	0.50	101	46	146			
trans-1,4-Dichloro-2-butene	5.44	mg/m3	0.50	109	50	142			
Iodomethane	5.56	mg/m3	0.50	111	66	132			
Vinyl acetate	6.12	mg/m3	0.50	122	42	120			S

Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



3020 Bozeman Avenue • Helena, Montana 59601 • (406) 443-4150

[illegible]

Energy Laboratories Inc

Sample Receipt Checklist

Client Name Hydrometrics Inc

Date and Time Received: 4/11/2007 2:44:00 PM

Work Order Number H07040098

Received by rit

Login completed by: Roxanne L. Tubbs

4/11/2007 2:44:00

Reviewed by

Signature

Date

Initials

Date

Carrier name Hand Del

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	na °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Adjusted? _____ Checked by _____

Contact and Corrective Action Comments:

None

ANALYTICAL SUMMARY REPORT

July 30, 2007

Hydrometrics Inc
3020 Bozeman Ave.
Helena, MT 59601Workorder No.: H07070118
Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 2 samples from Hydrometrics Inc on 7/12/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H07070118-001	YMCA Stack	07/12/07 9:30	07/12/07	Air	8260-Volatile Organic Comp, 40 CFR Part 258 App I
H07070118-002	CC Stack	07/12/07 10:00	07/12/07	Air	Same As Above

BRANCH LABORATORY LOCATIONSeli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520**SUBCONTRACTING ANALYSIS**

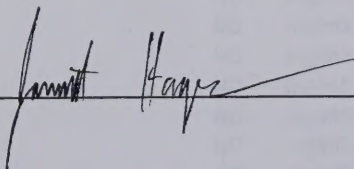
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____



CASE NARRATIVE

NONE

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07070118-001
Client Sample ID: YMCA Stack

Report Date: 07/30/07
Collection Date: 07/12/07 09:30
Date Received: 07/12/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	07/25/07 13:27 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	07/25/07 13:27 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Dichlorodifluoromethane	3.1	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
cis-1,2-Dichloroethene	0.70	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	07/25/07 13:27 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	07/25/07 13:27 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	07/25/07 13:27 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07070118-001
Client Sample ID: YMCA Stack

Report Date: 07/30/07
Collection Date: 07/12/07 09:30
Date Received: 07/12/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Vinyl chloride	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	07/25/07 13:27 / eli-b
Surr: 1,2-Dichloroethane-d4	102	%REC			70-130	SW8260B	07/25/07 13:27 / eli-b
Surr: Dibromofluoromethane	105	%REC			77-126	SW8260B	07/25/07 13:27 / eli-b
Surr: p-Bromofluorobenzene	107	%REC			76-127	SW8260B	07/25/07 13:27 / eli-b
Surr: Toluene-d8	107	%REC			79-122	SW8260B	07/25/07 13:27 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07070118-002
Client Sample ID: CC Stack

Report Date: 07/30/07
Collection Date: 07/12/07 10:00
Date Received: 07/12/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	07/25/07 14:21 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	07/25/07 14:21 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Dichlorodifluoromethane	1.5	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
cis-1,2-Dichloroethene	0.60	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	07/25/07 14:21 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	07/25/07 14:21 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	07/25/07 14:21 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Tetrachloroethene	0.43	mg/m3	J	0.50		SW8260B	07/25/07 14:21 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07070118-002
Client Sample ID: CC Stack

Report Date: 07/30/07
Collection Date: 07/12/07 10:00
Date Received: 07/12/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Vinyl chloride	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	07/25/07 14:21 / eli-b
Surr: 1,2-Dichloroethane-d4	100	%REC			70-130	SW8260B	07/25/07 14:21 / eli-b
Surr: Dibromofluoromethane	101	%REC			77-126	SW8260B	07/25/07 14:21 / eli-b
Surr: p-Bromofluorobenzene	109	%REC			76-127	SW8260B	07/25/07 14:21 / eli-b
Surr: Toluene-d8	104	%REC			79-122	SW8260B	07/25/07 14:21 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/30/07
Work Order: H07070118

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R97064		
Sample ID: LCSAIR	Laboratory Control Sample			Run: SUB-B97064			07/25/07 10:40		
Acetone	30.3	mg/m3	10	61	62	130			S
Benzene	5.36	mg/m3	0.50	107	71	133			
Bromochloromethane	5.64	mg/m3	0.50	113	68	131			
Bromodichloromethane	5.60	mg/m3	0.50	112	67	138			
Bromoform	5.84	mg/m3	0.50	117	64	136			
Bromomethane	4.40	mg/m3	0.50	88	60	138			
Carbon tetrachloride	5.04	mg/m3	0.50	101	61	144			
Chlorobenzene	5.56	mg/m3	0.50	111	78	136			
Chlorodibromomethane	5.84	mg/m3	0.50	117	72	136			
Chloroethane	5.28	mg/m3	0.50	106	64	136			
Chloroform	5.20	mg/m3	0.50	104	69	133			
Chloromethane	7.32	mg/m3	0.50	146	63	149			
1,2-Dibromo-3-chloropropane	5.04	mg/m3	0.50	101	63	125			
1,2-Dibromoethane	6.00	mg/m3	0.50	120	75	131			
Dibromomethane	5.80	mg/m3	0.50	116	72	133			
1,2-Dichlorobenzene	5.68	mg/m3	0.50	114	78	129			
1,4-Dichlorobenzene	5.56	mg/m3	0.50	111	78	132			
Dichlorodifluoromethane	6.32	mg/m3	0.50	126	55	141			
1,1-Dichloroethane	5.16	mg/m3	0.50	103	72	130			
1,2-Dichloroethane	5.72	mg/m3	0.50	114	57	146			
1,1-Dichloroethene	4.96	mg/m3	0.50	99	66	142			
cis-1,2-Dichloroethene	5.04	mg/m3	0.50	101	74	133			
trans-1,2-Dichloroethene	5.52	mg/m3	0.50	110	76	138			
1,2-Dichloropropane	6.00	mg/m3	0.50	120	72	135			
cis-1,3-Dichloropropene	6.20	mg/m3	0.50	124	75	132			
trans-1,3-Dichloropropene	6.48	mg/m3	0.50	130	77	145			
Ethylbenzene	5.56	mg/m3	0.50	111	78	131			
2-Hexanone	48.4	mg/m3	10	97	72	131			
Methyl ethyl ketone	39.9	mg/m3	10	80	55	145			
Methyl isobutyl ketone	48.0	mg/m3	10	96	73	129			
Methylene chloride	5.44	mg/m3	0.50	109	73	126			
Styrene	5.64	mg/m3	0.50	113	76	134			
1,1,1,2-Tetrachloroethane	5.76	mg/m3	0.50	115	75	135			
1,1,1,2,2-Tetrachloroethane	6.08	mg/m3	0.50	122	72	132			
Tetrachloroethene	5.32	mg/m3	0.50	106	78	137			
Toluene	5.64	mg/m3	0.50	113	78	134			
1,1,1-Trichloroethane	5.04	mg/m3	0.50	101	64	141			
1,1,2-Trichloroethane	6.16	mg/m3	0.50	123	72	133			
Trichloroethene	5.40	mg/m3	0.50	108	75	138			
Trichlorofluoromethane	5.12	mg/m3	0.50	102	58	139			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/30/07
Work Order: H07070118

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R97064		
Sample ID: LCSAIR	Laboratory Control Sample			Run: SUB-B97064			07/25/07 10:40		
1,2,3-Trichloropropane	5.24	mg/m3	0.50	105	67	133			
Vinyl chloride	5.68	mg/m3	0.50	114	66	140			
m+p-Xylenes	11.1	mg/m3	0.50	111	78	133			
o-Xylene	5.72	mg/m3	0.50	114	79	136			
Surr: 1,2-Dichloroethane-d4			0.50	95	70	130			
Surr: Dibromofluoromethane			0.50	99	77	126			
Surr: p-Bromofluorobenzene			0.50	108	76	127			
Surr: Toluene-d8			0.50	112	79	122			
Sample ID: LCSALX	Laboratory Control Sample			Run: SUB-B97064			07/25/07 11:25		
Acrylonitrile	48.4	mg/m3	10	97	60	130			
Carbon disulfide	4.48	mg/m3	0.50	90	46	146			
trans-1,4-Dichloro-2-butene	6.20	mg/m3	0.50	124	50	142			
Iodomethane	4.92	mg/m3	0.50	98	66	132			
Vinyl acetate	6.44	mg/m3	0.50	129	42	120			S
Surr: 1,2-Dichloroethane-d4			0.50	94	70	130			
Surr: p-Bromofluorobenzene			0.50	108	76	127			
Surr: Toluene-d8			0.50	106	79	122			
Sample ID: BLKAIR	Method Blank			Run: SUB-B97064			07/25/07 12:04		
Acetone	ND	mg/m3	10						
Acrylonitrile	ND	mg/m3	10						
Benzene	ND	mg/m3	0.50						
Bromochloromethane	ND	mg/m3	0.50						
Bromodichloromethane	ND	mg/m3	0.50						
Bromoform	ND	mg/m3	0.50						
Bromomethane	ND	mg/m3	0.50						
Carbon disulfide	ND	mg/m3	0.50						
Carbon tetrachloride	ND	mg/m3	0.50						
Chlorobenzene	ND	mg/m3	0.50						
Chlorodibromomethane	ND	mg/m3	0.50						
Chloroethane	ND	mg/m3	0.50						
Chloroform	ND	mg/m3	0.50						
Chloromethane	ND	mg/m3	0.50						
1,2-Dibromo-3-chloropropane	ND	mg/m3	0.50						
1,2-Dibromoethane	ND	mg/m3	0.50						
Dibromomethane	ND	mg/m3	0.50						
1,2-Dichlorobenzene	ND	mg/m3	0.50						
1,4-Dichlorobenzene	ND	mg/m3	0.50						
trans-1,4-Dichloro-2-butene	ND	mg/m3	0.50						
Dichlorodifluoromethane	ND	mg/m3	0.50						

Qualifiers:

RL - Analyte reporting limit.

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 07/30/07
Work Order: H07070118

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B			Batch: B_R97064						
Sample ID: BLKAIR	Method Blank		Run: SUB-B97064			07/25/07 12:04			
1,1-Dichloroethane	ND	mg/m3	0.50						
1,2-Dichloroethane	ND	mg/m3	0.50						
1,1-Dichloroethene	ND	mg/m3	0.50						
cis-1,2-Dichloroethene	ND	mg/m3	0.50						
trans-1,2-Dichloroethene	ND	mg/m3	0.50						
1,2-Dichloropropane	ND	mg/m3	0.50						
cis-1,3-Dichloropropene	ND	mg/m3	0.50						
trans-1,3-Dichloropropene	ND	mg/m3	0.50						
Ethylbenzene	ND	mg/m3	0.50						
2-Hexanone	ND	mg/m3	10						
Iodomethane	ND	mg/m3	0.50						
Methyl ethyl ketone	ND	mg/m3	10						
Methyl isobutyl ketone	ND	mg/m3	10						
Methylene chloride	ND	mg/m3	0.50						
Styrene	ND	mg/m3	0.50						
1,1,1,2-Tetrachloroethane	ND	mg/m3	0.50						
1,1,1,2,2-Tetrachloroethane	ND	mg/m3	0.50						
Tetrachloroethene	ND	mg/m3	0.50						
Toluene	ND	mg/m3	0.50						
1,1,1-Trichloroethane	ND	mg/m3	0.50						
1,1,2-Trichloroethane	ND	mg/m3	0.50						
Trichloroethene	ND	mg/m3	0.50						
Trichlorofluoromethane	ND	mg/m3	0.50						
1,2,3-Trichloropropane	ND	mg/m3	0.50						
Vinyl acetate	ND	mg/m3	0.50						
Vinyl chloride	ND	mg/m3	0.50						
m+p-Xylenes	ND	mg/m3	0.50						
o-Xylene	ND	mg/m3	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	92	70	130			
Surr: Dibromofluoromethane			0.50	98	77	126			
Surr: p-Bromofluorobenzene			0.50	108	76	127			
Surr: Toluene-d8			0.50	108	79	122			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Energy Laboratories Inc

Workorder Receipt Checklist



Hydrometrics Inc

H07070118

Login completed by: Roxanne L. Tubbs

Date and Time Received: 7/12/2007 10:30 AM

 Reviewed by: *Rob Smith*

Received by: rlt

Reviewed Date: 7/13/07

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	na°C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Contact and Corrective Action Comments:

None



2727 Airport Road • Helena, Montana 59601 • (406) 443-4150

Split Samples:
☐ Accepted ☐ Declined _____ Signature

ANALYTICAL SUMMARY REPORT

October 31, 2007

Hydrometrics Inc
3020 Bozeman Ave.
Helena, MT 59601

Workorder No.: H07100129

Project Name: 1273 City of Helena

Energy Laboratories Inc received the following 2 samples from Hydrometrics Inc on 10/10/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H07100129-001	YMCA Stack	10/10/07 10:30	10/10/07	Air	8260-Volatile Organic Comp, 40 CFR Part 258 App I
H07100129-002	CC Stack	10/10/07 13:30	10/10/07	Air	Same As Above

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT, EPA # MT00005
eli-c - Energy Laboratories, Inc. - Casper, WY, EPA# WY00002
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID, EPA # ID00942
eli-g - Energy Laboratories, Inc. - Gillette, WY, EPA# WY00006
eli-h - Energy Laboratories, Inc. - Helena, MT, EPA# MT00945
eli-r - Energy Laboratories, Inc. - Rapid City, SD, EPA# SD00012
eli-t - Energy Laboratories, Inc. - College Station, TX, EPA# TX01520

SUBCONTRACTING ANALYSIS

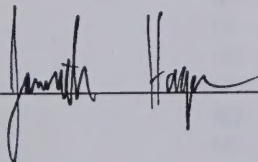
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES, INC. will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories are indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ELI appreciates the opportunity to provide you with this analytical service. For additional information, including certifications, and analytical services visit our web page www.energylab.com.

Report Approved By: _____



CASE NARRATIVE

NONE

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07100129-001
Client Sample ID: YMCA Stack

Report Date: 10/31/07
Collection Date: 10/10/07 10:30
Date Received: 10/10/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	10/23/07 15:23 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	10/23/07 15:23 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Chloroform	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Dichlorodifluoromethane	3.6	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1-Dichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
cis-1,2-Dichloroethene	0.74	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	10/23/07 15:23 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	10/23/07 15:23 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	10/23/07 15:23 / eli-b
Methylene chloride	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Tetrachloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07100129-001
Client Sample ID: YMCA Stack

Report Date: 10/31/07
Collection Date: 10/10/07 10:30
Date Received: 10/10/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Vinyl chloride	1.4	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	10/23/07 15:23 / eli-b
Surr: 1,2-Dichloroethane-d4	90.0	%REC		70-130		SW8260B	10/23/07 15:23 / eli-b
Surr: Dibromofluoromethane	96.0	%REC		77-126		SW8260B	10/23/07 15:23 / eli-b
Surr: p-Bromofluorobenzene	97.0	%REC		76-127		SW8260B	10/23/07 15:23 / eli-b
Surr: Toluene-d8	96.0	%REC		79-122		SW8260B	10/23/07 15:23 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07100129-002
Client Sample ID: CC Stack

Report Date: 10/31/07
Collection Date: 10/10/07 13:30
Date Received: 10/10/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Acetone	ND	mg/m3		10		SW8260B	10/23/07 16:11 / eli-b
Acrylonitrile	ND	mg/m3		10		SW8260B	10/23/07 16:11 / eli-b
Benzene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Bromochloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Bromodichloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Bromoform	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Bromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Carbon disulfide	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Carbon tetrachloride	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Chlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Chlorodibromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Chloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Chloroform	1.1	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Chloromethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2-Dibromo-3-chloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2-Dibromoethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Dibromomethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,4-Dichlorobenzene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
trans-1,4-Dichloro-2-butene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Dichlorodifluoromethane	13	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1-Dichloroethane	1.4	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2-Dichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1-Dichloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
cis-1,2-Dichloroethene	17	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
trans-1,2-Dichloroethene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2-Dichloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
cis-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
trans-1,3-Dichloropropene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Ethylbenzene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
2-Hexanone	ND	mg/m3		10		SW8260B	10/23/07 16:11 / eli-b
Iodomethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Methyl ethyl ketone	ND	mg/m3		10		SW8260B	10/23/07 16:11 / eli-b
Methyl isobutyl ketone	ND	mg/m3		10		SW8260B	10/23/07 16:11 / eli-b
Methylene chloride	1.9	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Styrene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1,1,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1,2,2-Tetrachloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Tetrachloroethene	0.71	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Toluene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1,1-Trichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,1,2-Trichloroethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hydrometrics Inc
Project: 1273 City of Helena
Lab ID: H07100129-002
Client Sample ID: CC Stack

Report Date: 10/31/07
Collection Date: 10/10/07 13:30
Date Received: 10/10/07
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Trichloroethene	1.1	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Trichlorofluoromethane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
1,2,3-Trichloropropane	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Vinyl acetate	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Vinyl chloride	2.0	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
m+p-Xylenes	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
o-Xylene	ND	mg/m3		0.50		SW8260B	10/23/07 16:11 / eli-b
Surr: 1,2-Dichloroethane-d4	90.0	%REC		70-130		SW8260B	10/23/07 16:11 / eli-b
Surr: Dibromofluoromethane	96.0	%REC		77-126		SW8260B	10/23/07 16:11 / eli-b
Surr: p-Bromofluorobenzene	92.0	%REC		76-127		SW8260B	10/23/07 16:11 / eli-b
Surr: Toluene-d8	91.0	%REC		79-122		SW8260B	10/23/07 16:11 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 10/31/07
Work Order: H07100129

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R101668		
Sample ID: LCSAir	Laboratory Control Sample			Run: SUB-B101668			10/23/07 12:39		
Acetone	28.0	mg/m3	10	56	62	130			S
Benzene	4.08	mg/m3	0.50	82	71	133			
Bromochloromethane	4.68	mg/m3	0.50	94	68	131			
Bromodichloromethane	4.24	mg/m3	0.50	85	67	138			
Bromoform	4.76	mg/m3	0.50	95	64	136			
Bromomethane	3.44	mg/m3	0.50	69	60	138			
Carbon tetrachloride	4.16	mg/m3	0.50	83	61	144			
Chlorobenzene	4.40	mg/m3	0.50	88	78	136			
Chlorodibromomethane	4.68	mg/m3	0.50	94	72	136			
Chloroethane	4.32	mg/m3	0.50	86	64	136			
Chloroform	4.16	mg/m3	0.50	83	69	133			
Chloromethane	4.68	mg/m3	0.50	94	63	149			
1,2-Dibromo-3-chloropropane	3.82	mg/m3	0.50	76	63	125			
1,2-Dibromoethane	4.64	mg/m3	0.50	93	75	131			
Dibromomethane	4.52	mg/m3	0.50	90	72	133			
1,2-Dichlorobenzene	4.64	mg/m3	0.50	93	78	129			
1,4-Dichlorobenzene	4.52	mg/m3	0.50	90	78	132			
Dichlorodifluoromethane	5.48	mg/m3	0.50	110	55	141			
1,1-Dichloroethane	4.20	mg/m3	0.50	84	72	130			
1,2-Dichloroethane	4.40	mg/m3	0.50	88	57	146			
1,1-Dichloroethene	3.96	mg/m3	0.50	79	66	142			
cis-1,2-Dichloroethene	4.24	mg/m3	0.50	85	74	133			
trans-1,2-Dichloroethene	4.24	mg/m3	0.50	85	76	138			
1,2-Dichloropropane	4.36	mg/m3	0.50	87	72	135			
cis-1,3-Dichloropropene	4.68	mg/m3	0.50	94	75	132			
trans-1,3-Dichloropropene	4.96	mg/m3	0.50	99	77	145			
Ethylbenzene	3.98	mg/m3	0.50	80	78	131			
2-Hexanone	35.6	mg/m3	10	71	72	131			S
Methyl ethyl ketone	37.2	mg/m3	10	74	55	145			
Methyl isobutyl ketone	35.7	mg/m3	10	71	73	129			S
Methylene chloride	4.40	mg/m3	0.50	88	73	126			
Styrene	4.28	mg/m3	0.50	86	76	134			
1,1,1,2-Tetrachloroethane	4.40	mg/m3	0.50	88	75	135			
1,1,1,2,2-Tetrachloroethane	4.56	mg/m3	0.50	91	72	132			
Tetrachloroethene	4.32	mg/m3	0.50	86	78	137			
Toluene	4.08	mg/m3	0.50	82	78	134			
1,1,1-Trichloroethane	4.12	mg/m3	0.50	82	64	141			
1,1,2-Trichloroethane	4.64	mg/m3	0.50	93	72	133			
Trichloroethene	4.16	mg/m3	0.50	83	75	138			
Trichlorofluoromethane	4.24	mg/m3	0.50	85	58	139			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

Report Date: 10/31/07
Work Order: H07100129

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: B_R101668		
Sample ID: LCSAir	Laboratory Control Sample			Run: SUB-B101668			10/23/07 12:39		
1,2,3-Trichloropropane	4.20	mg/m3	0.50	84	67	133			
Vinyl chloride	5.32	mg/m3	0.50	106	66	140			
m+p-Xylenes	8.48	mg/m3	0.50	85	78	133			
o-Xylene	4.32	mg/m3	0.50	86	79	136			
Surr: 1,2-Dichloroethane-d4			0.50	90	70	130			
Surr: Dibromofluoromethane			0.50	97	77	126			
Surr: p-Bromofluorobenzene			0.50	94	76	127			
Surr: Toluene-d8			0.50	94	79	122			
Sample ID: LCSLx	Laboratory Control Sample			Run: SUB-B101668			10/23/07 13:34		
Acrylonitrile	40.8	mg/m3	10	82	60	130			
Carbon disulfide	3.77	mg/m3	0.50	75	46	146			
trans-1,4-Dichloro-2-butene	4.60	mg/m3	0.50	92	50	142			
Iodomethane	4.16	mg/m3	0.50	83	66	132			
Vinyl acetate	5.28	mg/m3	0.50	106	42	120			
Surr: 1,2-Dichloroethane-d4			0.50	90	70	130			
Surr: Dibromofluoromethane			0.50	96	77	126			
Surr: p-Bromofluorobenzene			0.50	95	76	127			
Surr: Toluene-d8			0.50	93	79	122			
Sample ID: BLK1023	Method Blank			Run: SUB-B101668			10/23/07 14:22		
Acetone	ND	mg/m3	10						
Acrylonitrile	ND	mg/m3	10						
Benzene	ND	mg/m3	0.50						
Bromochloromethane	ND	mg/m3	0.50						
Bromodichloromethane	ND	mg/m3	0.50						
Bromoform	ND	mg/m3	0.50						
Bromomethane	ND	mg/m3	0.50						
Carbon disulfide	ND	mg/m3	0.50						
Carbon tetrachloride	ND	mg/m3	0.50						
Chlorobenzene	ND	mg/m3	0.50						
Chlorodibromomethane	ND	mg/m3	0.50						
Chloroethane	ND	mg/m3	0.50						
Chloroform	ND	mg/m3	0.50						
Chloromethane	ND	mg/m3	0.50						
1,2-Dibromo-3-chloropropane	ND	mg/m3	0.50						
1,2-Dibromoethane	ND	mg/m3	0.50						
Dibromomethane	ND	mg/m3	0.50						
1,2-Dichlorobenzene	ND	mg/m3	0.50						
1,4-Dichlorobenzene	ND	mg/m3	0.50						
trans-1,4-Dichloro-2-butene	ND	mg/m3	0.50						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hydrometrics Inc
Project: 1273 City of Helena

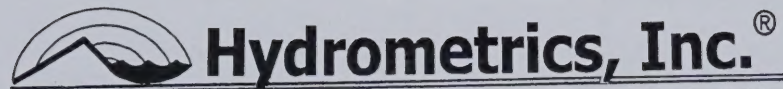
Report Date: 10/31/07
Work Order: H07100129

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B			Batch: B_R101668						
Sample ID: BLK1023	Method Blank		Run: SUB-B101668			10/23/07 14:22			
Dichlorodifluoromethane	ND	mg/m3	0.50						
1,1-Dichloroethane	ND	mg/m3	0.50						
1,2-Dichloroethane	ND	mg/m3	0.50						
1,1-Dichloroethene	ND	mg/m3	0.50						
cis-1,2-Dichloroethene	ND	mg/m3	0.50						
trans-1,2-Dichloroethene	ND	mg/m3	0.50						
1,2-Dichloropropane	ND	mg/m3	0.50						
cis-1,3-Dichloropropene	ND	mg/m3	0.50						
trans-1,3-Dichloropropene	ND	mg/m3	0.50						
Ethylbenzene	ND	mg/m3	0.50						
2-Hexanone	ND	mg/m3	10						
Iodomethane	ND	mg/m3	0.50						
Methyl ethyl ketone	ND	mg/m3	10						
Methyl isobutyl ketone	ND	mg/m3	10						
Methylene chloride	ND	mg/m3	0.50						
Styrene	ND	mg/m3	0.50						
1,1,1,2-Tetrachloroethane	ND	mg/m3	0.50						
1,1,2,2-Tetrachloroethane	ND	mg/m3	0.50						
Tetrachloroethene	ND	mg/m3	0.50						
Toluene	ND	mg/m3	0.50						
1,1,1-Trichloroethane	ND	mg/m3	0.50						
1,1,2-Trichloroethane	ND	mg/m3	0.50						
Trichloroethene	ND	mg/m3	0.50						
Trichlorofluoromethane	ND	mg/m3	0.50						
1,2,3-Trichloropropane	ND	mg/m3	0.50						
Vinyl acetate	ND	mg/m3	0.50						
Vinyl chloride	ND	mg/m3	0.50						
m+p-Xylenes	ND	mg/m3	0.50						
o-Xylene	ND	mg/m3	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	91	70	130			
Surr: Dibromofluoromethane			0.50	97	77	126			
Surr: p-Bromofluorobenzene			0.50	97	76	127			
Surr: Toluene-d8			0.50	93	79	122			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



2727 Airport Road • Helena, Montana 59601 • (406) 443-4150

[illegible]

Energy Laboratories Inc

Workorder Receipt Checklist



Hydrometrics Inc

H07100129

Login completed by: Roxanne L. Tubbs

Date and Time Received: 10/10/2007 1:35 PM

Reviewed by: JBB JHK

Received by: wjj

Reviewed Date: 10/11/07

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	na°C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Contact and Corrective Action Comments:

None

